ABSTRACT OF THE DISCLOSURE

A communication apparatus for high-speed data transmission over power line networks comprises a head-end unit which provides a single logical entry point into the communication network, an infrastructure of physical power line cables, one or more client-end units which communicate with the head-end unit, and one or more hybrid units which simultaneously acts as a head-end unit for another physical sub-network of the power line communication network and functions as a client-end unit of another physical sub-network of the power line communication network.